FSCC TECHNIQUES and PROCEDURES SMARTPACK

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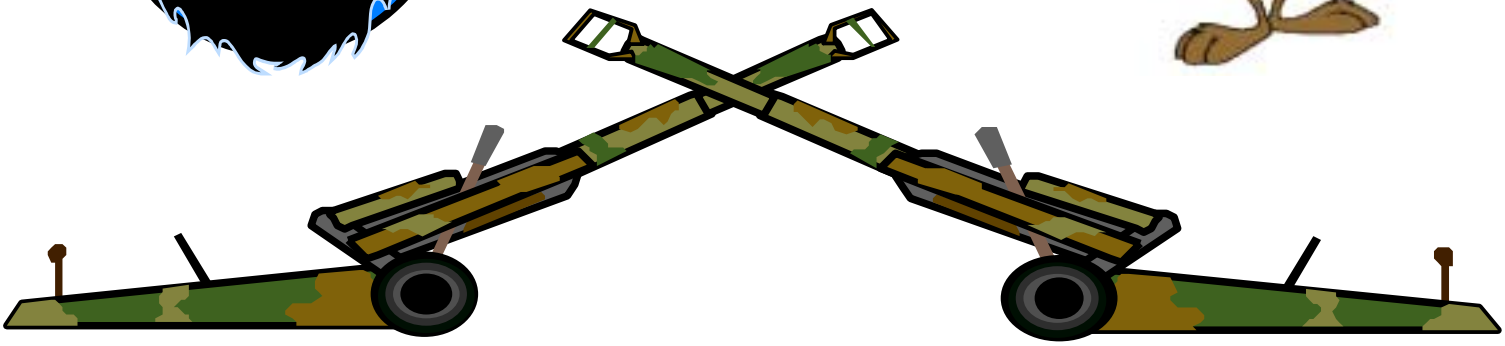

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BASIC INFORMATION

INTRODUCTION

There are few billets in the Fleet Marine Force that demand as much diverse knowledge as the Fire Support Coordinator (FSC). This smart pack is designed to assist the FSC primarily at the battalion level and secondarily at the regimental level to include members of the Fire Support Coordination Center (FSCC). It is not an exhaustive compilation of all necessary information for the FSC, nor is it meant to negate or supersede in-depth knowledge of Fleet Marine Force Manuals (FMFMs) or specific unit Standard Operating Procedures (SOP)s, but to compliment and potentially streamline their usage and incorporation.

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FSC ROLE AND RESPONSIBILITIES

The FSC is assigned the responsibility for the overall operation, organization, and training of personnel in the FSCC. The commander delegates the necessary authority to the FSC to control and supervise the FSCC. The FSC should have a capable assistant in the FSCC. The assistant FSC performs the duties of the FSC in his absence and generally assists him in the execution of FSCC functions.

The FSC translates the commander's guidance for fires into a concept of fire support, assists the commander in the development of fire support tasks, and supervises the subsequent development of the fire support plan. Much of his effort is devoted to deciding the methodology best suited to accomplish each fire support task, reviewing refinements to the fire support plan to see that there is no duplication of effort, ensuring safety for all friendly elements, and expediting the delivery of fires. The FSC will recommend appropriate Fire Support Coordination Measures (FSCMs) to the commander, clear fires within the unit's boundaries and coordinate fires outside unit boundaries, coordinate Close Air Support (CAS), coordinate employment of Direct Support (DS) artillery, and coordinate Naval Surface Fire Support (NSFS).

During an operation the FSC is monitoring missions from the battalion observers as their units advance. He must keep an up-to-date situation map showing unit boundaries, fire support coordination measures and unit locations as they change. The coordinates of each mission are plotted and visually inspected relative to the coordination measures and unit locations. Questionable targets that plot close to adjacent boundaries or near other unit positions are coordinated with the appropriate FSCC's or commanders. Missions that plot outside of the FSC's limits must be coordinated with the unit affected before they can be fired. On-going air strikes are monitored. Those that fall short of the Fire Support Coordination Line (FSCL) must be coordinated. The same applies to surface fires delivered short of the Coordinated Fire Line (CFL).

Information on all indirect fires should be made available and coordinated with the Direct Air Support Center (DASC) via the Air Support Liaison Team (ASLT), which is normally conducted at the regimental level or higher, so that pilots can be advised and aircraft can be routed accordingly. By the same token, the DASC should also be advised

of any surface fires beyond FSCL. Aircraft can attack ground targets beyond the FSCL without coordination so it is imperative that this information is made available.

Be as permissive as possible when allocating assets and clearing missions. At times FSCs have a tendency to husband their supporting arms, or second-guess unit commanders who may be in contact. Your ability to apply sound weaponeering principles to a given situation and maintain situational awareness will help to ensure responsive fire support at the critical points on the battlefield.

FIRE SUPPORT COORDINATION MEASURES (FSCM)

PERMISSIVE

Coordinated Fire Line (CFL). A line beyond which conventional surface fire support means (mortars, field artillery and naval gunfire) may fire at any time within the zone of the establishing headquarters without additional coordination. (MCRP 5-2A).

(1) Purpose. The purpose of the CFL is to expedite the attack of targets beyond the CFL without coordination with the ground commander in whose zone of action targets are located. It also provides the ground commander with an area within his zone where his forces can operate in safety from uncoordinated friendly surface delivered indirect fires.

(2) Establishment. A CFL is normally established at the battalion level and higher.

Fire Support Coordination Line (FSCL). A line established by the appropriate land or amphibious commander to ensure coordination of fire not under his control but which may affect current tactical operations. Supporting elements may attack targets forward of the FSCL, without prior coordination with the land or amphibious commander provided the attack would not produce adverse surface effects on or to the rear of the line. (MCRP 5-2A)

(1) Purpose. The purpose of the FSCL is to facilitate the expeditious attack of targets of opportunity beyond the coordinating measure.

(2) Establishment. A FSCL is normally established by the Commander Landing Force (CLF) after coordination with the Commander Amphibious Task Force (CATF). When Marine Corps forces operate independently on land, the FSCL is established by the Marine Air Ground Task Force Commander (MAGTF).

Free Fire Area (FFA). A FFA is a specific designated area into which any weapons system may fire without any additional coordination with the establishing headquarters. (MCRP 5-2A).

(1) Purpose. The purpose of the FFA is to expedite fire and to facilitate jettisoning of CAS munitions if an aircraft is unable to drop on a target.

(2) Establishment. . A FFA is established only by the military or civilian commander with jurisdiction over the area, usually at division or higher.

Airspace Coordination Area (ACA). An ACA is a three-dimensional block of airspace in a target area, established by the appropriate ground commander, in which friendly aircraft are reasonably safe from friendly surface fires. The airspace coordination area may be formal or informal (Joint Pub 1-02). Formal ACAs require detailed planning. More often, informal ACAs are established using time, lateral, or altitude separation between surface- and air-delivered weapon effects. ACAs can vary from physically defined areas to the various methods of separation. Physical areas can include routes (control point to IP, HA to BP) or areas (over the target, IP, BP). ACAs are requested by the commander requesting air support but are established by the airspace control authority. (MCRP 5-2A).

No-fire Area (NFA). An NFA is an area where no fires or effects of fires are allowed. Two exceptions are (1) when establishing headquarters approves fires temporarily within the NFA on a mission by mission basis, and (2) when the enemy force within the NFA engages a friendly force, the commander may engage the enemy to defend his force. (MCRP 5-2A).

(1) Purpose. The purpose of the NFA is to prohibit fires or their effects in the area, normally to protect civilians or cultural areas.

(2) Establishment. Usually the CATF, CLF, or Marine Expeditionary Force (MEF) commander establishes an NFA. On arrival of military forces the force commander coordinates the location of an NFA with local authorities.

Restrictive Fire Area (RFA). An RFA is an area in which specific restrictions are imposed and into which fires that exceed those restrictions will not be delivered without prior coordination with the establishing headquarters (MCRP 5-2A).

(1) Purpose. The purpose of the RFA is to regulate fires into an area according to the stated restrictions. This means that fires or certain types of ordnance; e.g., ICM or WP; can be controlled in an area where friendly forces are or will be located.

(2) Establishment. Any ground unit commander within his zone may establish an RFA. However, it is not normally established below battalion level. When RFAs are used to protect a forward unit from friendly fires (e.g., Reconnaissance team), the size of the RFA should be of sufficient size to allow the maneuver of the unit but not so large as to needlessly restrict fire support in other areas. To facilitate rapidly changing maneuver areas, on call RFAs may be used. The dimensions, location, and restrictions of the on call RFA are prearranged. The RFA is activated and deactivated when requested by the maneuvering unit or scheduled by time or event.

Restrictive Fire Line (RFL). An RFL is a line established between converging friendly forces (one or both may be moving) that prohibits fires, or effects from fires, across the line without coordination with the affected force. (MCRP 5-2A).

(1) Purpose. The purpose of an RFL is to prevent fratricide between converging friendly forces.

(2) Establishment. The common commander of the converging forces establishes the RFL. He may delegate establishing authority to the senior commander of the two converging forces, or to the commander of the maneuvering force in a linkup operation between a moving and a stationary force.

Restricted Operations Zone (ROZ). A ROZ is not a fire support coordinating measure, but an airspace coordination measure. It is an area of defined dimensions within which the operation of one or more airspace users is restricted. Examples of ROZs are the platoon airspace hazard (PAH) and target airspace hazard (TAH) used with ATACMS units. (MCRP 5-2A).

(1) Purpose. The purpose of the ROZ is to restrict aircraft from defined areas in order to prevent fratricide. PAHs and TAHs aid in the deconfliction of airspace for ATACMS units by restricting aircraft from the airspace directly surrounding both the launch and impact area.

(2) Establishment. Since they are airspace coordination measures, the Airspace Control Authority establishes ROZs. A PAH or TAH has no implications for indirect fires, but is submitted by the FSCC through the DASC to the TACC. ROZs can be preplanned with stated dimensions.

MANEUVER CONTROL MEASURES

Boundaries. A boundary is a maneuver control measure. Boundaries designate the geographical limits of the AO of a unit (Joint Pub 1-02). Within their boundaries, unless otherwise restricted, units may execute fire and maneuver without close coordination with neighboring units unless otherwise restricted. Normally units do not fire across boundaries unless the fires are coordinated with the adjacent unit or the fires are beyond a fire support coordination measure; e.g., CFL. These restrictions apply to all munitions and the effects to include smoke and illumination. This does not preclude a commander from deciding, in certain situations, that his subordinate units may fire across boundaries at positively identified enemy units without coordinating for that specific target. This will only apply to direct fires and observed indirect fires. It also can only be applied to boundaries that that commander has established; e.g., a battalion commander can only apply this exception to his own companies' boundaries. (MCRP 5-2A).

Phase Lines. A phase line is a maneuver control measure used by land forces for control and coordination of military operations (Joint Pub 1-02). It is usually on recognizable terrain extending across the zone of action. Units normally report crossing phase lines and they can be used to identify limits of advance, control fires, or define an AO. The using unit specifies the purpose of each phase line and actions required by forces affected by it. (MCRP 5-2A).

FIRE SUPPORT COORDINATION MEASURE GRAPHICAL DEPICTION

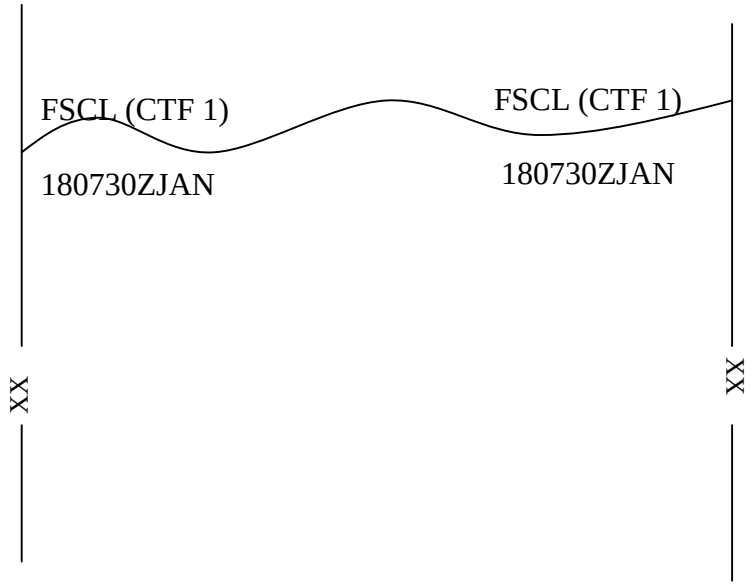
Provided below are the graphic depictions of Permissive Fire Support Coordination Measures:

FREE FIRE AREA

CFL (1 MAR) **CFL (1MAR)**

021200R JUN **021200R JUN**

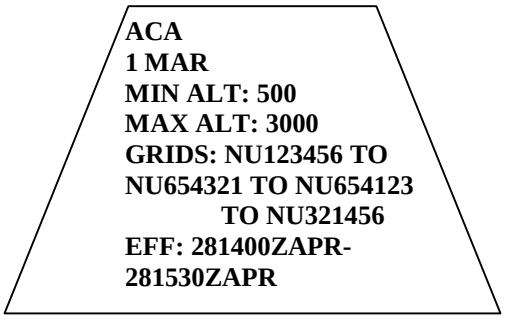
COORDINATED FIRE LINE



FIRE SUPPORT COORDINATION LINE

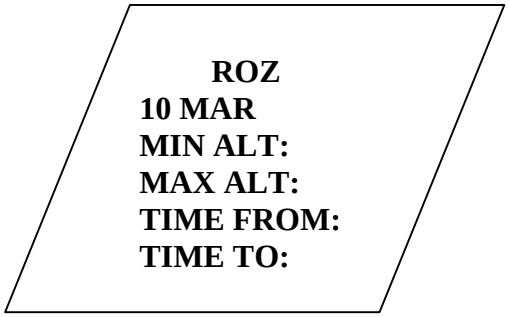
FIRE SUPPORT COORDINATION MEASURE GRAPHICAL DEPICTION

Provided below are the graphic depictions of Restrictive Fire Support Coordination Measures:

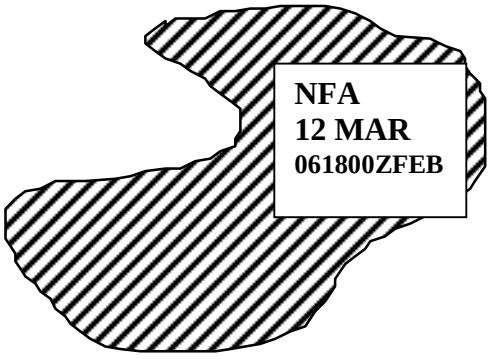


AIRSPACE COORDINATION AREA

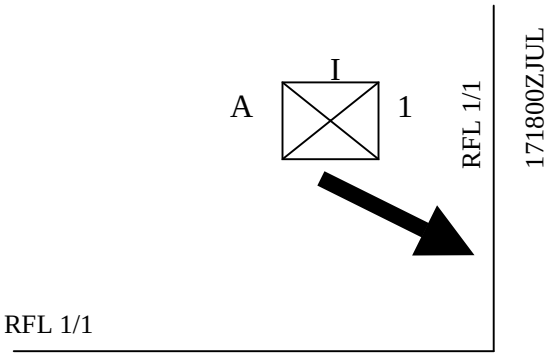
RESTRICTIVE FIRE AREA

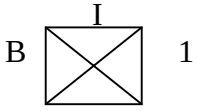


RESTRICTED OPERATIONS ZONE



NO FIRE AREA





RESTRICTIVE FIRE LINE

FIRE SUPPORT TERMS

Commander's Guidance for Fire Support. In very specific terms answers the questions of **WHAT, WHERE, WHEN,** and **WHY** fire support is to influence every phase of the battle. (MCWP 3-16.1)

Concept of Fires. The logical sequence of Fire Support Tasks (FSTs) that if integrated with the scheme of maneuver will accomplish the mission and achieve the commander's intent. Allocates in broad terms the FS assets to achieve the FSTs. The concept of fires is the basis of the fires paragraph.

Counterpreparation. The counter prep is fired in two phases with firing beginning and ending with all units participating and no gaps permitted. Phase I and phase III targets are scheduled together as one phase, and then phase II targets are scheduled. Counter preparations fires are always on call and scheduled starting at 0 in the timing block. (MCWP 3-16)

Essential Field Artillery Tasks (EFAT) A task for the Field Artillery that must be accomplished to achieve an FST. A fully developed EFAT has a task, purpose, method and endstate. The task describes the effects of fires against a specific enemy formation (s). (Effects of fires = Suppress, neutralize, destroy, screen, or obscure.) An EFAT is normally specified in the method of the FST. The purpose clearly ties the task to the FST it supports. (NOTE: The USMC is moving away from Essential Field Artillery tasks to Essential Artillery Tasks.)

Fire Support Tasks (FST) A fire support task that describes a targeting effect against a specific enemy formation's function or capability. Failure to achieve a FST may require the Commander to alter his tactical or operational plan. A fully developed FST has a ***TASK, PURPOSE, METHOD, AND EFFECTS (TPME).*** The task describes what targeting effect fires must achieve on an enemy formation's function or capability. The purpose describes why the task contributes to maneuver. The method describes how the task will be accomplished by assigning responsibility to observers or units and delivery assets and providing amplifying information or restrictions. Effects quantify successful accomplishment of the task. (MCWP 3-16) Regardless of the unit supported, the basic tasks of fire support give the commander and his fire support representatives a frame of reference to evaluate the overall effectiveness of fires.

Groups of Targets. The group schedule is normally on call and is not scheduled for a time sequence. It is scheduled so that fires will strike the targets at the same time. The group number is shown in the timing block space. Below the group number, list the targets of the group opposite the firing unit assigned the target. Below each target number, show the number of rounds to be fired. No line or dot is drawn. More than one group for a given operation may be scheduled on the same scheduling worksheet. Normally, one firing unit is assigned per target. (MCWP 3-16)

High Payoff Target (HPT). A target whose loss to the threat will contribute to the success of the friendly course of action. (MCRP 5-2A)

High Value Target (HVT). Assets that the threat commander requires for the successful completion of a specific course of action. (MCRP 5-2A)

Named Area of Interest (NAI). A point or area along a particular avenue of approach through which enemy activity is expected to occur. Activity or lack of activity within an NAI will help to confirm or deny a particular enemy course of action. (MCRP 5-2A)

Preparation Fire. Fire delivered on a target preparatory to an assault. It is an intense volume of fire delivered in accordance with a time schedule. The fires normally commence prior to H-hour and may extend beyond it. They may start at a prescribed time or be held on call. The duration of the preparation is influenced by factors such as the fire support needs of the entire force, numbers of targets, and firing assets and ammunition available. Targets are divided into three categories. Phase I targets include hostile fire units; e.g., batteries, OPs, radars, anti-air defenses. Phase II targets include command and control; e.g., CPs, supply/logistics areas, communications sites. Phase III targets include front line elements; e.g., trench lines, dug in positions. If a target fits more than one category, categorize it where it poses the greatest threat. All units must start and cease firing at the same time. For a detailed discussion of considerations and guidelines for constructing preparation fires see Section 4 page 3. (MCWP 3-16)

Program of Targets. A program is the predetermined sequential attack of targets of a similar nature. It may be executed on call, at a specific time, or when a particular event occurs. Targets are designated by their nature and based upon the commander's guidance. For example, in a counterfire program, all the targets are artillery system related OPs, artillery batteries, mortar platoon, and CPs. Programs may be planned for various purposes; e.g., counterfire, SEAD, counter-OP, countermechanized. Programs are not graphically displayed. (MCWP 3-16)

Scheme of fires. The detailed, logical sequence of target and fire support events to find and attack the high payoff targets. It details how we expect to execute the FS plan in accordance with the time and space of the battlefield to accomplish the Commander's Fire Support Tasks. The products of the fire support annex articulate the scheme of fires.

Series of targets. A number of targets and/or groups of targets fired in a predetermined sequence in support of a scheme of maneuver. (MCWP 3-16)

Target Area of Interest (TAI). The geographical area or point along a mobility corridor where successful interdiction will cause the enemy to either abandon a particular course of action or require him to use specialized engineer support to continue, where he can be acquired and engaged by friendly forces. Not all TAIs will form part of the friendly course of action; only TAIs associated with high-payoff targets are of interest to the staff. These are identified during staff planning and wargaming. TAIs differ from engagement areas in degree. Engagement areas plan for the use of all available weapons. TAIs might be engaged with a single weapon. (MCRP 5-2A)

Target List. (DOD) The listing of targets maintained and promulgated by the senior echelon of command; it contains those targets which are to be engaged by supporting arms, as distinguished from a list of targets which may be maintained by any echelon as confirmed, suspect, or possible targets for informational and planning purposes. (MCRP3-16.6A)

Target Numbering. The target number consists of six characters, comprising two letters and four numerals; e.g., AB1234. The two-letter group may be used to indicate the originator of the target number and/or the level controlling the target data.

In artillery, targets of opportunity are assigned target numbers by the battery computer system (BCS) or Initial Fire Support Automated System (IFSAS) to facilitate filing in the computer. If the FO desires the target to be recorded, the number assigned by the BCS (identified in the message to observer) will be used. For planned targets, targets are numbered using the block of numbers allocated to the FO or by the FSC. With NSFS, spotters assign target numbers to targets of opportunity (in the call for fire). Planned targets are numbered from a block of numbers allocated by the FSC to the spotter or by the FSCC.

Triggers. Event or time oriented criteria used to initiate planned actions directed toward achieving surprise and inflicting destruction on the enemy. A designated point or points (selected along identifiable terrain) in an engagement area used to mass fires at a predetermined range. (MCRP 5-2A)

Weapons Free. (DOD, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may be fired at any target not positively recognized as friendly. (MCRP3-16.6A)

Weapons Hold. (DOD, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may only be fired in self-defense or in response to a formal order. (MCRP3-16.6A)

Weapons Tight. (DOD, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may be fired only at targets recognized as hostile. (MCRP3-16.6A)

Zone of Fire. A zone of fire is an area into which a designated ground unit or fire support ship delivers, or is prepared to deliver, fire support. Fire may or may not be observed. Units and ships assigned zones of fire are responsible for attacking known targets and targets of opportunity according to their mission and the guidance of the supported commander. (Joint Pub 1-02).

Purpose. The purpose of zones of fire in amphibious operations is to divide land into zones of fire which are assigned to fire support ships and units as a means of to coordinate their efforts with each other and with the scheme of maneuver of the supported ground unit. The unit or ship should be located so that it can best support the actions of the supported unit.

CAS TERMINOLOGY

Bingo- Minimum fuel for safe return to base.
Contact Point(CP)- Point at which initial communication is established between the aircraft and the controlling party.
Continue- Aircraft is clear to continue the pass but is not clear to drop ordnance.
Final Attack Cone (FAC)- An assigned range of magnetic compass headings that an aircrew may fly during the ordnance delivery phase of a CAS attack.
Initial Point (IP)- Point where the aircraft begins its timed run into the target area.
Laser On- Designate target immediately.
Loiter Time- Amount of time available to remain on station.
No Joy- Pilot does not have the item being discussed in sight.
Rope- Pilot requests a small circular motion with the infrared Pointer (IR) to aid in acquisition.
Squirt- Forward Air Controller (FAC) requests release of fuel to aid in spotting aircraft.
Tally- Visual contact made.
Winchester- All ordnance is expended.
9 Line- Standard brief passed to pilot to attack target.
10 Seconds- Pilot wants the laser on in approximately 10 seconds.
Snake- Jiggle the beam of the IR pointer on the target.

F/W and R/W Mark Considerations

1. **LASER**
   - Must have line of sight.
   - Determine pulse repetition frequency codes.
   - Identify direction of attack.
   - Does the aircraft have a laser designator?
   - Does the attacking aircraft have a Laser Spot Tracker (LST)
   - Delivery system must release ordnance within envelope/cone.
   - Is battlefield clean?
   - Ensure that FAC/designator are on same target when working with R/W.
   - RW laser platforms must be abreast or forward of lead trace prior to being cleared hot.
   - When Laser is employed, "SPOT" must be transmitted.

2. **IR POINTER**
   - Used in conjunction with NVDs.
   - Can be used to mark friendly positions.
   - During low LUX levels, entire beam can be seen (narrow at the controller's position, mushroomed at the target).
   - Clearance parameters from FSC are met.
   - Positive Communication with between designator and aircraft.
   - When IR pointers are employed, "VISUAL" must be transmitted (to ensure controller's position is positively identified) as well as a "TALLY TARGET" call.
   - Ensure line 7 of the CAS 9-line reads "IR" or "IR Pointer".

- LPL-30 -- adequate for RWCAS targets within 5000 m. FWCAS may have difficulty acquiring the beam outside of 20 degrees from Designator Target Line (DTL) and above 3000'.
- GCP-1A/B (Ground Commander's Pointer) – has an adjustable beam .5mR to 30 degrees.
- TORCH – an open purchase item in use with MEUs and ANGLICO; high powered - visible from 10,000'.
- IZLID – The Infrared ZOOM LASER Illuminator / Designator is an open purchase IR LASER pointer, no designator capability, that provides the greatest capability for High Light Level (HLL) and MOUT IR LASER pointer target marking.

3. DESIGNATOR / IR POINTER CONSIDERATIONS

- With the proliferation of Night Vision Devices (NVD), the enemy can also see both the point of origin and the terminal point of the IR Beam.
- The battlefield may be cluttered with IR Beams.
- Plan for redundancy.

4. PGM ISSUES

- Plan for the mark early - as early as 3 minutes prior to PGM TOT.
- Have the A/C in position early enough to see the mark.
- Once mark dissipates, A/C will use onboard systems to maintain contact with target.
- Plan a backup mark.

5. ILLUMINATION ON THE DECK

- Consider micro-terrain in the vicinity of target that will permit the aircraft, but will prevent the FAC, to see the mark.
- Plan a backup mark.

6. WP/RP

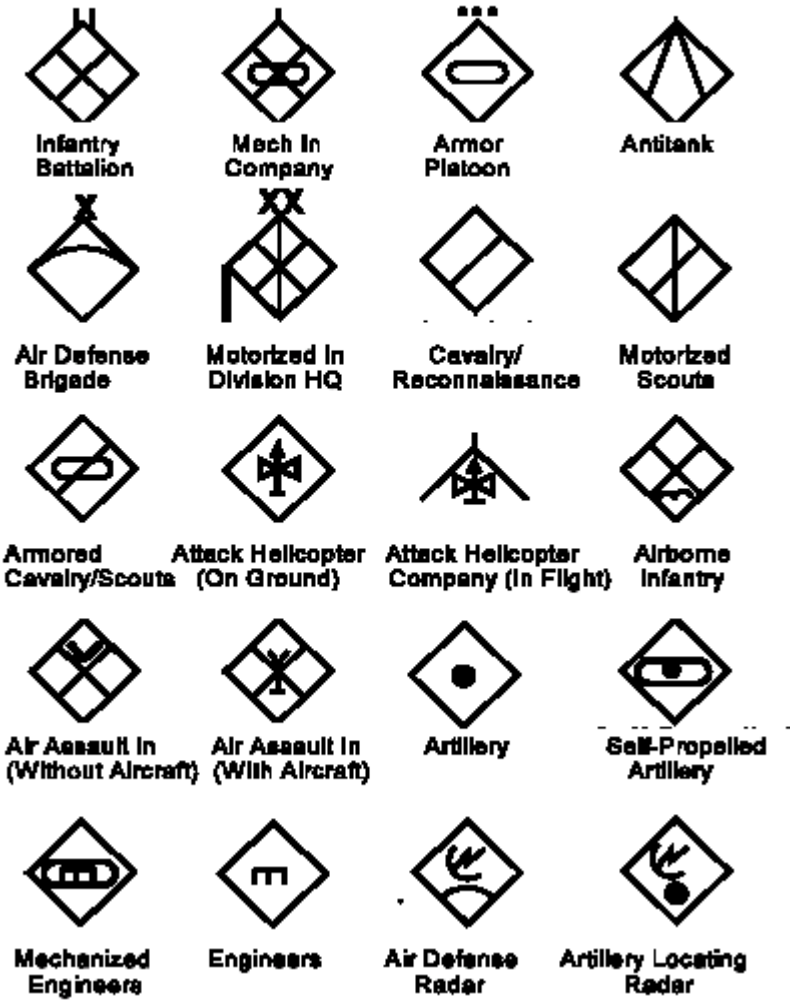
- Consider wind effects when selecting WP or RP to mark targets.
- Consider obscuration effects for precision guided munitions (PGM's).
  Ensure that you differentiate target mark from: tank main gun, self generating smoke, M825 smoke rounds, increment burns, engineering and EOD detonations.

COMMONLY USED MILITARY SYMBOLS

Provided below is a small collection of selected commonly used military symbols, both enemy and friendly. They are provided here due to their commonality. For more in depth information on military symbols see MCRP 5-2A *Operational Terms and Graphics*, chapter Four.

Enemy Unit and Equipment Symbols

EXAMPLES OF ENEMY COMBAT UNITS



Friendly Unit and Equipment Symbols